



DOCKET NO.: RMS-0698/PH-7103

*JPu* 1616  
PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**In Re Application of:**

**Alan P. Carpenter, et al.**

**Confirmation No.: 4231**

**Application No.: 09/931,317**

**Group Art Unit: 1616**

**Filing Date: August 16, 2001**

**Examiner: Michael G. Hartley**

**For: GAS MICROSPHERE LIPOSOME COMPOSITES FOR ULTRASOUND  
IMAGING AND ULTRASOUND STIMULATED DRUG RELEASE**

DATE OF DEPOSIT: *June 15, 2004*

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*Elizabeth A. McLoud*

TYPED NAME: Elizabeth A. McLoud

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Dear Sir:

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of

the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fee is required.

- ☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;

or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

- ☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

- ☒ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

- ☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith
- ☐ Copies of references listed on the attached Form PTO 1449 are not required to be submitted pursuant to the June 30, 2003 recent revisions to 37 CFR § 1.98(a)(2)(i).

EXCEPT THAT:


- ☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.
- ☐ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☐ Copies of references [list as appropriate] listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior Application No. \_\_\_\_\_, filed \_\_\_\_\_.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

- ☐ The relevance of those listed references which are not in the English language is as follows:
- ☒ There are no listed references which are not in the English language.

Date:

6/15/04

  
S. Maurice Valla  
Registration No. 43,966

WOODCOCK WASHBURN LLP  
One Liberty Place - 46th Floor  
Philadelphia, PA 19103  
Telephone: (215) 568-3100  
Facsimile: (215) 568-3439



<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. BMS-0698/PH-7103	Application No. 09/931,317
		Applicant Alan P. Carpenter, et al.	
		Filing Date August 16, 2001	Group 1616
		Confirmation No. 4231	
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	507	Deamer, D.W., "Preparation of solvent vaporization liposomes," <i>Liposome Techn.</i> , <b>1984</b> , Vol. 1, Chap. 3, 29-35	
	508	Bedu-Addo, F.K., et al., "Effects of polyethyleneglycol chain length and phospholipids acyl chain composition on the interaction of polyethyleneglycol-phospholipid: implications in liposomal drug delivery," <i>Pharmac. Res.</i> , <b>1996</b> , 13(5), 710-717	
	509	Belsito, S., et al., "Sterically stabilized liposomes of DPPC/DPPE-PEG:2000. A spin label ESR and spectrophotometric study," <i>Biophysical Chem.</i> , <b>1998</b> , 33-43	
	510	Maruyama, K., et al., "Prolonged circulation time in vivo of large unilamellar liposomes composed of distearoyl phosphatidylcholine and cholesterol containing amphipathic poly(ethylene glycol)," <i>Biochimica et Biophysica Acta</i> , <b>1992</b> , 1128, 44-49	
	511	Nikolova, A.N., et al., "Effect of grafted PEG-2000 on the size and permeability of vesicles," <i>Biochimica et Biophysica Acta</i> , <b>1996</b> , 120-128	
	512	Ohki, K., et al., "Short- and long-range $Ca^{2+}$ -induced lateral phase separations in ternary mixtures of phosphatidic acid, phosphatidylcholine and phosphatidylethanolamine," <i>Chem. &amp; Physics of Lipids</i> , <b>1989</b> , 109-117	
	513	Yu, S.-H., et al., "Effect of pulmonary surfactant protein B (SP-B) and calcium on phospholipids adsorption and squeeze-out of phosphatidylglycerol from binary phospholipids monolayers containing dipalmitoylphosphatidylcholine," <i>Biochimica et Biophysica Acta</i> , <b>1992</b> , 1126, 26-34	
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**U. S. PATENT DOCUMENTS**

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	514	4,863,740	09/05/89	Kissel, et al.	424	450
	515	5,580,575	12/03/96	Unger, et al.	424	450
	516	5,656,211	08/12/97	Unger, et al.	264	4.1
	517	5,705,187	01/06/98	Unger	424	450
	518	5,733,572	03/31/98	Unger, et al.	424	450
	519	5,733,024	06/30/98	Unger, et al.	424	450
	520	5,776,429	07/07/98	Unger, et al.	424	9.52
	521	5,853,752	12/29/98	Unger, et al.	424	450
	522	5,922,304	07/13/99	Unger	424	9.3
	523	5,935,553	08/10/99	Unger, et al.	424	9.51
	524	6,028,066	02/22/00	Unger	514	180
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	528	6,071,494	06/06/00	Unger	424	9.4
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	530	6,086,573	07/11/00	Siegel, et al.	604	507
	531	6,088,613	07/11/00	Unger	600	420
	532	6,090,800	07/18/00	Unger, et al.	514	180
	533	6,117,414	09/12/00	Unger	424	9.4
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	535	6,143,276	11/07/00	Unger	424	9.3
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	548	6,548,047 B1	04/15/03	Unger	424	9.51
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	550	6,576,220 B2	06/10/03	Unger	424	9.32
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	556	WO 96/08234	03/21/96	PCT		
	557	WO 96/31196	10/10/96	PCT		
	558	WO 97/00638	01/09/97	PCT		
	559	WO 97/40858	11/06/97	PCT		

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Examiner Initial		Document No.	Date	Country	Translation	
					YES	NO
	560	WO 97/48337	12/24/97	PCT		
	561	WO 98/09600	03/12/98	PCT		
	562	WO 98/10799	03/19/98	PCT		
	563	WO 98/42384	10/01/98	PCT		
	564	WO 98/47487	10/29/98	PCT		
	565	WO 98/50041	11/12/98	PCT		
	566	WO 98/51284	11/19/98	PCT		
	567	WO 99/30620	06/24/99	PCT		
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<b>EXAMINER</b>				<b>DATE CONSIDERED</b>		